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Journal of Business Venturing 18 (2003) 41–60

JOURNAL
of BUSINESS
VENTURING

Beyond social capital: the role of entrepreneurs' social competence in their financial success

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Received 1 September 1999; received in revised form 1 October 2000; accepted 1 November 2000

Abstract

Two studies investigated the hypothesis that the higher entrepreneurs' *social competence* (their ability to interact effectively with others as based on discrete social skills), the greater their financial success. Entrepreneurs working in two different industries (cosmetics and high-tech) completed a questionnaire designed to measure several aspects of their social competence (e.g., accuracy in perceiving others, skill at impression management, persuasiveness). Results indicated that one aspect of social competence (e.g., accuracy in perceiving others) was positively related to financial success for both groups of entrepreneurs. In addition, social adaptability was related to financial success for entrepreneurs in the cosmetics industry, and expressiveness was related to such success for the entrepreneurs in the high-tech industry. The questionnaire employed to assess social competence was cross-validated with a third group of entrepreneurs who completed this measure themselves, and whose social competence was also rated by persons who knew them well. The two sets of ratings agreed closely, thus providing evidence for the validity of this measure. Overall, findings are consistent with the view that a high level of social capital (e.g., a favorable reputation, extensive social network, etc.) assists entrepreneurs in gaining access to persons important for their success. Once such access is attained, however, entrepreneurs' social competence influences the outcomes they experience.

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Keywords: Entrepreneurs' social competence

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1. Executive summary

Venkataraman (1997) and Shane and Venkataraman (2000) have recently suggested that a key focus for the field of entrepreneurship should be “Why, when, and how *some people and not others* discover and exploit opportunities.” (Italics added.) In this research, we focus on a question closely related to this suggestion: Why are some entrepreneurs more successful than others in exploiting opportunities they have discovered?

Previous efforts to address this important issue have often considered the personal characteristics of entrepreneurs or, more recently, their cognitive processes. Here, we suggest that another aspect of entrepreneurs’ behavior — their effectiveness in interacting with other persons (i.e., their social competence) — may also influence their success. Consistent with suggestions offered by Baron and Markman (2000), we reason as follows: While entrepreneurs’ *social capital* (as based on their reputation, social networks, etc.) often helps them gain access to persons important for their success (e.g., venture capitalists, potential customers), their *social competence* then plays a key role in determining the outcomes they experience (e.g., whether they obtain financing, attract key employees, etc.). Thus, we hypothesized that other factors being equal, the higher the entrepreneurs’ social competence, the greater their financial success.

To test this prediction, two groups of entrepreneurs working in distinctly different industries (cosmetics and high-tech) completed a questionnaire designed to measure several aspects of their social competence. In addition, information on their financial success was obtained (personal yearly income from their businesses averaged across several years). The measure of social competence was validated with a third group of entrepreneurs who completed this measure themselves, and who were also rated for social competence on a slightly modified version of the questionnaire by persons who knew them well (e.g., spouses, close business associates). The two sets of ratings agreed closely, thus providing some evidence for the validity of the self-report measure used in the present research.

Parallel analysis and confirmatory factor analysis indicated that this measure assessed four distinct aspects of social competence: social perception (accuracy in perceiving others), impression management (the ability to induce favorable reactions in others), social adaptability (the ability to adapt to a wide range of social situations), and expressiveness (the ability to express emotions and feelings in an appropriate manner). One of these factors — social perception — was positively related to financial success for both groups of entrepreneurs. Another aspect of social competence — social adaptability — was related to financial success for entrepreneurs in the cosmetics industry, and a third aspect — expressiveness — was related to such success for entrepreneurs in the high-tech industry.

These results have both theoretical and practical implications. From a theoretical perspective, they suggest that in order to fully answer the question “Why are some entrepreneurs more successful than others?” it may be useful to consider certain aspects of entrepreneurs’ behavior, (e.g., their social competence), as well as their personal characteristics, cognitive processes, and the market and environmental conditions in which they operate.

From a practical perspective, the present results point to additional means for assisting entrepreneurs. In contrast to aspects of personality, the skills on which social competence is based are readily open to modification and to enhancement. Providing entrepreneurs with training in these skills might assist them in their efforts to exploit opportunities and establish successful ventures.

2. Introduction

In a recent, influential article, Venkataraman (1997, p. 6) defined entrepreneurship as “A scholarly field that seeks to understand how opportunities to bring into existence ‘future’ goods and services are discovered, created, and exploited, by whom, and with what consequences.” Consistent with this definition, Shane and Venkataraman (2000) further suggest that one important question for entrepreneurship researchers is “Why, when, and how *some people and not others* discover and exploit opportunities.” (Italics added.) The research reported here focused on one aspect of this question. Specifically, it sought to add to existing knowledge concerning the following issue: “Why are some entrepreneurs more successful than others in exploiting opportunities they discover?”

Efforts to answer this question have a long history in the field of entrepreneurship. Initial research focused on the personal traits of entrepreneurs and, disappointingly, reported only modest success (e.g., Shaver and Scott, 1991). However, recent investigations derived from more sophisticated theoretical frameworks suggest that some personal characteristics of entrepreneurs, such as their self-efficacy (e.g., Chen et al., 1998; Markman et al., 2000) and overall proclivity for entrepreneurship (e.g., Stewart et al., 1999), may indeed play a role in their success.

Another approach to determining why some entrepreneurs are more successful than others has focused on cognitive factors and processes — the ways in which entrepreneurs think, reason, and reach decisions (e.g., Baron, 1998; Brush, 1992; Jenkins and Johnson, 1997; Gatewood et al., 1995; McCarthy et al., 1993). Research within this perspective has identified a number of cognitive factors that influence entrepreneurs’ success, including overconfidence in their own judgments, greater use of the representativeness heuristic (e.g., Busenitz and Barney, 1997), and a reduced tendency to engage in counterfactual thinking (e.g., Baron, 2000a).

Recently, Baron and Markman (2000) and Baron (2000b) have called attention to an additional set of factors that may be relevant to this question. Specifically, they propose that certain aspects of entrepreneurs’ behavior — especially their effectiveness in interacting with other persons in face-to-face contexts — may play a role in their success. Consistent with previous literature, Baron and Markman distinguish between *social capital* — the sum of the actual and potential resources individuals obtain from their relationships with others (e.g., Nahapiet and Ghoshal, 1998) — and *social competence* — entrepreneurs’ overall effectiveness in interacting with others (e.g., Spence et al., 1999). It is important to note that the term social competence is employed here as in previous research (e.g., Spence et al., 1999), primarily as a summary term for the combined effects of various social skills — such as the

ability to perceive others accurately (social perception; e.g., Zebrowitz, 1997), make a good first impression on them (e.g., Ferris et al., 2000; Wayne and Kacmar, 1991), or persuade them to change their views or behavior (e.g., Shavitt and Brock, 1994).

We suggest that both social capital and social competence may play distinct, but perhaps complementary roles, in entrepreneurs' success. Turning first to social capital, a growing body of evidence indicates that a high level of social capital may contribute to entrepreneurs' success. Specifically, high social capital provides entrepreneurs with enhanced access to information and increased cooperation and trust from others (e.g., Fukuyama, 1995). Moreover, entrepreneurs who possess high social capital (as based on extensive social networks, status, personal ties, and referrals) are more likely to receive funds from venture capitalists than entrepreneurs who are lower on this dimension (Shane and Cable, 1998).

As noted by Baron and Markman (2000), however, social capital may be only part of the total picture where entrepreneurs' success is concerned. Specifically, these authors note that while social capital helps entrepreneurs "get through the door" (i.e., gain access to venture capitalists, potential customers and others), once such access is attained, entrepreneurs' social competence may play an important role in determining the outcomes they experience (e.g., whether they receive funding, obtain orders, attract key partners and employees, and so on). Thus, social competence, too, may be important. The process through which many organizations hire new employees for high-level positions provides a clear illustration of the contrasting effects of social capital and social competence. Often, social capital plays a key role in determining which applicants make it onto the "short list" and are invited for interviews. In general, these are persons possessing high levels of social capital: favorable reputations, an established record in the field, a degree from an excellent university, work experience with "good" employers, and so on. But it is then the impressions these candidates make on the individuals involved in the final selection that largely determines whether they are actually hired. All readers have probably encountered candidates for employment who appeared to "walk on water" prior to a visit but who, once actually present, managed only weak gurgling sounds at best. Such persons possess high levels of social capital but are lacking in skills that permit them to interact effectively with others, and this becomes apparent during face-to-face meetings.

On the basis of these considerations, we suggest that entrepreneurs' *social competence* may well influence their success. Specifically, we hypothesize that *all other factors being equal, the higher entrepreneurs' social competence, the greater their financial success.*

Several lines of evidence provide support for our suggestion of a link between entrepreneurs' social competence and their financial success. First, and most directly, an extensive body of research on the impact of social skills indicates that these proficiencies strongly affect the outcomes experienced by individuals in many business contexts (e.g., Segrin and Kenney, 1995; Weber and Harvey, 1994; Tsui, 1998). For instance, skills with respect to impression management have been found to exert beneficial effects on the outcomes experienced by individuals both in job interviews (e.g., Riggio and Throckmorton, 1988) and in yearly performance reviews (e.g., Wayne et al., 1997). In one large-scale study involving more than 1400 employees, for example, Wayne et al. (1997) found that social skills were the single best predictor of job performance ratings and assessments of potential for promotion for employ-

ees in a wide range of jobs. Comparable beneficial effects have been observed for other aspects of social competence, such as skill in perceiving others accurately (this assists individuals in determining whether others are being truthful in negotiations and other business contexts; e.g., DePaulo, 1994), persuasiveness (skill in this respect assists individuals in reaching their personal goals in a wide range of contexts; e.g., Cialdini, 1994), and the ability to adapt to or be comfortable with a wide range of persons (individuals who show a high level of social adaptability tend to gain more promotions, and sooner, than those who do not; e.g., Kilduff and Day, 1994). In sum, an extensive body of evidence suggests that persons possessing superior social skills (which provide the foundation for social competence) experience more favorable outcomes than ones lacking in such skills in many business contexts (e.g., Ferris et al., in press; Thomas et al., 1997). Extending these findings to the realm of entrepreneurship, we suggest that high social competence may assist entrepreneurs in their efforts to found new ventures.

Additional support for our hypothesis is provided by the fact that *teams* of entrepreneurs rather than single individuals found a substantial proportion (perhaps an actual majority) of new ventures (e.g., Cooper and Daily, 1997). For example, Teach et al. (1986) found that two or more principals originate over two-thirds of the start-up software companies they studied. Given that a large proportion of start-ups involve the efforts of two or more entrepreneurs, it seems reasonable to suggest that high levels of social competence on the part of these entrepreneurs will facilitate interactions between them, and may, in this manner, contribute to the success of their new ventures.

Third, research findings provide support for the prediction that entrepreneurs' social competence can favorably affect their financial success. For example, in a study of the factors influencing the success of new ventures, Duchesneau and Gartner (1990) found that entrepreneurs whose companies are successful engage in more communication with others, and are more effective in this activity, than entrepreneurs whose companies fail. Similarly, in a discussion of cooperation between entrepreneurs and venture capitalists, Cable and Shane (1997) note that such cooperation may increase when the entrepreneur and venture capitalist share a positive social or business relationship. In a like manner, Vesper (1990) includes effective personal relationships as one of the five key ingredients in new venture formation. The suggestion that social competence plays some role in entrepreneurs' success appears to be consistent with Gartner et al.'s (1992) proposal that one of the key activities performed by entrepreneurs is convincing others to share their beliefs about what the emerging organization can, and will, become. It seems possible that entrepreneurs may be aided, in their efforts to accomplish this task, by proficiency with respect to several social skills (e.g., persuasiveness).

Finally, social competence may also play a role in both the discovery and exploitation of opportunities by entrepreneurs. Shane and Venkataraman (2000) note that information which can lead to the recognition of opportunities is imperfectly distributed across individuals and that this, in turn, may be one important reason why some persons, but not others, recognize opportunities and choose to exploit them. Shane and Venkataraman (2000) further suggest that asymmetries in opportunity-relevant information may derive from several sources, including *information corridors* (the possession of prior information necessary to identify an opportunity), and the cognitive properties of individual entrepreneurs — modes of thought

or perception that enable them to recognize and adequately value opportunities. We suggest here that social competence, too, may play a role in this regard. Specifically, entrepreneurs high in such competence may be more successful in gaining the trust and confidence of persons with whom they interact, with the result that these individuals more readily share information with them (cf., Ferris et al., *in press*). Further, once in possession of such information, socially competent entrepreneurs may be more effective in communicating it to other persons with whom they work. As a result, entrepreneurs high in social competence, relative to ones who are lower on this dimension, may gain greater access to valuable information and be better able to utilize such knowledge. This, in turn, may provide them with competitive advantage that contributes to their ultimate success (e.g., Hitt et al., 1999; Reed and DeFillippi, 1995).

One additional point should be added. While social competence is useful in many different contexts, it seems possible that it might be especially valuable to entrepreneurs. This may be so because during the process of new venture creation, entrepreneurs must form social relationships with many different persons (e.g., customers, suppliers, new employees) “from scratch.” Moreover, they must do so in environments that are highly uncertain and unstructured (see, e.g., Carter et al., 1996; Gartner, 1988; Holt, 1992). It is precisely in such contexts — ones in which individuals cannot fall back upon the established relationships or clearly prescribed norms and roles present in many existing organizations — that social competence might prove most useful (see, e.g., Gartner et al., 1992). This possibility has been suggested by Cable and Shane (1997), who note that it is during the early stages of venture creation that effective communication between entrepreneurs and venture capitalists is most crucial, because it is during this time that divergent expectations are most likely to emerge.

In sum, several lines of evidence point to the possibility that entrepreneurs who are adept at interacting with others may gain important benefits, and so achieve greater financial success. But what aspects of social competence (i.e., which specific social skills) will be most useful to entrepreneurs? Unfortunately, previous research offers little guidance in this respect. No studies known to the authors have specifically examined the impact of specific social skills in the context of entrepreneurship. Given the lack of directly pertinent evidence, we reasoned that it would be best to cast a wide empirical net in the present study. Thus, we first surveyed recent literature on the impact of various social skills in business contexts. On the basis of this review, we identified several social skills for which strongest and most consistent evidence existed (e.g., Wayne et al., 1997; Robbins and DeNisi, 1994; Thomas et al., 1997; Weber and Harvey, 1994); these were the ones on which we focused in the present investigation. The social skills identified in this manner included: (1) *social perception* — accuracy in perceiving others (e.g., their traits, intentions, and motives); (2) *impression management* — a wide range of techniques for inducing positive reactions in others; (3) *persuasiveness* — the ability to change others’ views or behavior in face-to-face encounters; (4) *social adaptability* — the ability to adapt to, or feel comfortable in a wide range of social situations; and (5) *expressiveness* — the ability to express one’s emotions and feelings clearly to generate enthusiasm in others. In addition, because another construct — *emotional intelligence* — has been the subject of much recent attention both in management research and in

the mass media (e.g., Goleman, 1995, 1998), we included items to assess it, too. Emotional intelligence refers to a cluster of skills relating to the emotional side of life, including the ability to regulate one's own emotions (e.g., hold one's temper in check), influence the emotions of others, motivate oneself, and develop satisfactory long-term relationships (see Goleman, 1995, 1998).

3. Method

3.1. Participants

Two samples of entrepreneurs participated in the study — a total of 230 individuals. Those in the first sample were 159 independent sales contractors who created their own cosmetics distribution organizations, and also created or helped to “spin off” additional independent distribution organizations. All were female and all ran their businesses from their homes in one mid-western state.

The entrepreneurs in our second sample were 71 top executives in high-tech entrepreneurial firms recruited from a list of executives in such companies provided by a center for entrepreneurship in a large mid-western university. A large majority was male (91.5%). The executives in both samples were founders of their companies. Because data from the two samples were obtained at different times (separated by approximately 2 months), they are treated here as an initial study and a replication study.

3.2. Procedures

3.2.1. Measure of social competence

Both groups of entrepreneurs were asked to complete a questionnaire consisting of 30 items designed to assess proficiency with respect to the social skills described above. Each item consisted of a statement (e.g., “I generally make a good first impression on others,” “I can usually read others well — tell how they are feeling in a given situation”), and respondents rated the extent to which this statement was true of them on a five-point scale (1 = definitely *not* like me; 5 = exactly like me). Because no single existing measure assessed all of the skills we wished to investigate, we employed 18 items from a widely used measure of social skills (e.g., Social Skills Inventory; Riggio, 1986) and also developed additional items to assess aspects of social competence not covered by this measure. Items from the Social Skills Inventory relevant to social perception, social adaptability, expressiveness, and one aspect of emotional intelligence (the ability to regulate one's own emotions), were selected for inclusion. Additional items were added to assess persuasiveness (four items), impression management (four items), and other aspects of emotional intelligence (e.g., skills relating to effective long-term relationships, such as the ability to criticize others effectively and resolve conflicts; four items). New items were developed on the basis of a careful review of recent research on relevant topics, and were tested in two pilot studies conducted with 182 undergraduate and graduate students at two

different universities. Exploratory factor analyses of the data from these pilot studies indicated that these items did indeed cluster together as recognizable factors. Thus, they were adopted for use in the present research. We should note that several surveys designed to measure impression management exist (e.g., Kumar and Beyerlein, 1991; Wayne and Ferris, 1990). However, because items on these measures relate primarily to efforts by subordinates to make good impressions on supervisors, they did not appear to be entirely suitable for use in the present research.

3.2.2. *Other measures*

Additional items on the questionnaire requested information on the entrepreneurs' financial success (average income, as based upon personal yearly income in US dollars for each of 4 successive years in the initial sample, and each of 2 successive years in the replication sample), business tenure (how long they had run their business), age, and education. Another measure — company revenues from sales (again in US dollars) — was also obtained for the second sample. (This measure was not applicable to the first sample, for which company income and the entrepreneurs' income were identical.)

A total of 248 surveys were mailed to the first sample of entrepreneurs; of these, 172 were returned (a 69% response rate). Nineteen surveys were incomplete; thus, data analyses for this sample are based on 159 usable questionnaires. A total of 110 surveys were mailed to entrepreneurs in the second sample. Seventy-one were returned, for a response rate of 64.5%. These high rates of return were obtained by means of a timed sequence, including a courtesy presurvey phone call, the actual mailing of surveys, and finally, a series of three to five follow-up postsurvey phone calls to nonrespondents.

4. Results

4.1. *Preliminary analyses*

In order to determine whether the items on the questionnaire assessed distinct aspects of social competence, a principal component factor analysis with varimax rotation was performed on the total sample (the initial and replication studies; $n = 230$). Parallel analysis (Horn, 1965) was then applied to determine the appropriate number of factors to retain. Parallel analysis generates an artificial data set with the same number of observations, variables, means, and standard deviations as the variables in the actual data set. The artificial data set is then factor analyzed, and eigenvalues are recorded for each factor extracted. This procedure is repeated (10 times in the present study), and an average eigenvalue for each of the factors (across replications) is calculated. These values are then plotted as in a scree plot, and compared with eigenvalues for the factors extracted from the actual data set. Factors are retained if the eigenvalues for the actual data set exceed those from the artificial data set. Zwick and Velicer (1986) concluded, on the basis of a large Monte Carlo study, that parallel analysis was more accurate than other methods such as Kaiser's eigenvalue greater than 1.0 rule and Cattell's scree test, for determining the number of factors to retain.

The parallel analysis conducted for the present data indicated that the appropriate number of factors to extract was four (see below for description of these factors). The four factors that emerged from the factor and parallel analyses and the items that loaded highly on them (factor loadings greater than 0.40 on a single factor and no cross-loadings higher than 0.25) are presented in Table 1. Examination of this table suggests that the four factors are readily interpretable, and represent four of the factors selected for study in this research. These factors, which were assessed by 16 of the 30 items on the scale, can be readily labeled as follows:

1. social perception (four items; e.g., “I can usually read others well — tell how they are feeling in a given situation.”)
2. social adaptability (five items; e.g., “I can adjust to any social situation,” “I can talk to anybody about anything.”)
3. expressiveness (four items; e.g., “What I feel inside shows outside.”)
4. impression management (two items; e.g., “I’m good at flattery and can use it to my advantage,” “I can appear to like someone even when I don’t.”)

Discrete factors did not appear for either persuasiveness or emotional intelligence.

Before proceeding to additional analyses, the four-factor structure suggested by the parallel analysis was tested using confirmatory factor analysis. Although the overall chi-square test of model fit was statistically significant, $\chi^2(183)=284.76$, $P<.001$,² a variety of indices suggested an adequate model fit. The Root Mean Square Error of Approximation (RMSEA) was 0.05. The Root Mean Residual (RMR) was 0.06 and the Standardized RMR was 0.07. The Comparative Fit Index (CFI) was 0.91 and the traditional Goodness of Fit Index (GFI) was 0.89. The statistical significance of each estimated parameter was also assessed by respective *t*-values, which were found to be significant ($P<.05$). The completely standardized solution indicated that this solution is admissible. The commonalities of all the variables were well above 0.50, and the construct reliabilities for the factors were also high. Taken together, these results suggest that the hypothesized four-factor model fit the data reasonably well. In view of these findings, subsequent analyses and data interpretation were based on the four-factor model rather than the six-factor model we had initially proposed.

Descriptive statistics (means, standard deviations, correlations, and Cronbach’s α) for the four factors are presented in Table 2 for each of the two samples of entrepreneurs. As Table 2 shows, reliability (as assessed by Cronbach’s α) was acceptable for three of the scales, but was unacceptably low for one factor—impression management. Thus, this factor was

² A nonsignificant chi-square indicates that the model implied covariance matrix and the observed covariance matrix do not differ, and therefore provides evidence of acceptable fit. Unfortunately, the chi-square test is highly sensitive to departures from multivariate normality, to sample size, and to model complexity (Anderson and Gerbing, 1988). Consequently, such chi-square tests should be interpreted with caution. For this reason, many experts view a model as acceptable if its chi-square value is less than twice the size of its degrees of freedom, as was true here. At present, many researchers have recommended use of a number of heuristic statistics, termed goodness-of-fit indices, to assess overall model fit. Several of these were employed here to assess the four-factor model, and suggested that it did, indeed, provide an adequate fit to the data.

Table 1
Results of initial factor analysis

Items	Factors			
Social Perception	1	2	3	4
V11. I'm a good judge of other people	0.75	0.01	0.09	0.03
V29. I can usually recognize others' traits accurately by observing their behavior	0.75	0.16	0.01	0.13
V9. I can usually read others well — tell how they are feeling in a given situation	0.74	0.23	0.06	0.01
V23. I can tell why people have acted the way they have in most situations	0.63	0.09	0.04	0.20
V21. I generally know when it is the right time to ask someone for a favor	0.61	0.02	0.04	0.01
Social adaptability				
V8. I can easily adjust to being in just about any social situation	0.27	0.69	− 0.13	− 0.04
V7. I can be comfortable with all types of people — young or old, people from the same or different backgrounds as myself	0.27	0.69	0.13	0.00
V17. I can talk to anybody about almost anything	0.27	0.60	0.21	0.03
V2. People tell me that I'm sensitive and understanding	0.02	0.44	0.11	0.14
V15. I have no problems introducing myself to strangers	0.08	0.43	0.02	0.21
Expressiveness				
V18. People can always read my emotions even if I try to cover them up	− 0.03	0.20	0.71	0.05
V6. Whatever emotion I feel on the inside tends to show on the outside	0.01	0.21	0.71	0.17
V4. Other people can usually tell pretty much how I feel at a given time	0.04	0.36	0.66	0.04
V5. I am very sensitive to criticism from others	0.03	0.19	0.62	0.22
V14. I am often concerned about what others think of me	0.13	0.25	0.57	0.31
Impression management				
V26. I'm good at flattery and can use it to my own advantage when I wish	0.20	0.10	0.14	0.63
V24. I can ready seem to like another person even if this is not so	0.14	0.22	0.08	0.50
Eigenvalues	4.27	3.49	2.91	1.91
Percent of variance explained	14.22	11.16	9.71	6.37

Table 2
Descriptive statistics

Factor	Mean	S.D.	Correlations		Cronbach's α
			2	3	
<i>Sample 1: cosmetics (n = 159)</i>					
1. Skill at social perception	3.82	0.58	.31 *	— .10	0.83
2. Social adaptability	2.71	0.66		— .05	0.67
3. Expressiveness	3.13	0.47			0.74
<i>Sample 2: high-tech (n = 71)</i>					
1. Skill at social perception	3.70	0.65	.45 *	.10	0.77
2. Social adaptability	2.56	0.54		.10	0.65
3. Expressiveness	3.63	0.49			0.66

* Correlation significant at .01 (two-tailed).

eliminated from further consideration and was not included in subsequent regression analyses. Correlations between the remaining three factors were generally low, thus suggesting that they reflect relatively distinct aspects of social competence.

4.2. Social competence and financial success: initial study

In order to determine whether various social skills are related to entrepreneurs' success, a multiple regression analysis was conducted. In this analysis, demographic variables (e.g., business tenure, education, and age) and the three aspects of social competence described above (social perception, social adaptability, expressiveness) were regressed on entrepreneurs' average yearly income (based on 4 successive years). As noted earlier, impression

Table 3
Standardized regression weights, t -values, adjusted R^2 , ΔR^2 , and significance levels for the initial sample

	β	t	$P <$	Adjusted R^2	ΔR^2	ΔF	$P <$
<i>Step 1: (demographic variables)</i>							
Tenure	0.15	1.51	.13				
Education		– 0.34	.75				
Age	0.10	1.00	.32				
				.02	.07	1.36	.26
<i>Step 2: (demographic and social competence variables)</i>							
Tenure	0.14	1.52	.13				
Education	– 0.03	– 0.32	.75				
Age	0.08	0.82	.41				
Social perception	0.19	2.08	.04				
Expressiveness	0.03	0.31	.76				
Social adaptability	0.15	1.91	.06				
				.19	.17	4.86	.005

Dependent variable = Average yearly income.

management was not included in these analyses because of the low reliability of the scale that assessed this item. Demographic variables were entered on Step 1, followed by the three social competence factors on Step 2. Results (see Table 3) indicated that the demographic variables were not significantly related to the entrepreneurs' yearly income. However, one aspect of social competence, skill at social perception, was significantly, and positively, related to average yearly income ($\beta=0.19$, $t=2.08$, $P<.04$). Results for a second aspect of social competence, social adaptability, closely approached but did not quite attain significance ($\beta=0.15$, $t=1.91$, $P<.06$). In addition, as shown in Table 3, adding the three social competence factors to the regression equation produced a significant increment in R^2 ($\Delta R^2=.17$, $F=4.86$, $P<.005$). These results indicate that for this sample of entrepreneurs, the higher the entrepreneurs' scores with respect to two aspects of social competence, the greater their financial success.

4.3. Social competence and financial success: replication study

A corresponding regression analysis was performed on data for the second sample of entrepreneurs (founders of high-tech companies). This analysis indicated that again, none of the demographic variables were significantly related to the entrepreneurs' financial success (Table 4). However, two aspects of social competence — social perception ($\beta=0.29$, $t=2.09$, $P<.04$) and expressiveness ($\beta=0.27$, $t=2.07$, $P<.04$) — were significantly related to financial success. These results indicate that for this sample of entrepreneurs, the higher the entrepreneurs' scores with respect to these two aspects of social competence, the greater their financial success. Once again, adding the social competence factors to the regression equation produced a significant increment in R^2 ($\Delta R^2=.13$, $F=3.67$, $P<.02$).

Table 4

Standardized regression weights, t -values, adjusted R^2 , ΔR^2 , and significance levels for the replication sample

	β	t	$P<$	Adjusted R^2	ΔR^2	ΔF	$P<$
<i>Step 1: (demographic variables)</i>							
Tenure	0.25	1.82	0.07				
Education	0.01	0.06	0.95				
Age	0.03	0.25	0.80				
				.02	.07	1.46	.23
<i>Step 2: (demographic and social competence variables)</i>							
Tenure	0.25	1.83	0.07				
Education	0.07	0.59	0.56				
Age	0.02	0.13	0.90				
Social perception	0.29	2.09	0.04				
Expressiveness	0.27	2.07	0.04				
Social adaptability	-0.17	-1.13	0.26				
				.14	.13	3.67	.02

Dependent variable = Average yearly income.

For this second sample of entrepreneurs, data were also available concerning company revenues from sales. A regression analysis indicates that one aspect of social competence — expressiveness — was significantly related to this financial measure ($\beta=0.30$, $t=1.98$, $P=.05$). This factor also produced a change in R^2 that approached, but did not quite attain, significance [$\Delta R^2=.08$, $F(1,39)=3.84$, $P=.056$; $R^2=.20$]. In sum, for both samples of entrepreneurs, aspects of social competence were significantly related to measures of financial success.

4.4. Cross-validation of measure of social competence

To obtain evidence on the accuracy of entrepreneurs' ratings of their own social skills, a third sample of entrepreneurs was asked to complete the survey employed here. These entrepreneurs were also asked to have another person *who knew them well* (e.g., a spouse, other family member, close business associate) complete a slightly modified version of this survey on which this person rated the entrepreneur. A total of 51 entrepreneurs were contacted, and for 15 of these individuals, questionnaires were received from both the entrepreneur and another person who knew them well (a return rate of 28.4%). (Questionnaires were also received from an additional seven entrepreneurs, for an overall return rate of 43.1%. However, since surveys from people who knew these entrepreneurs well were not obtained, these data were excluded from our cross-validation procedure.)

The two sets of ratings were then compared by correlating entrepreneurs' self-ratings with those provided by people who knew them well for each of the four factors. Results indicated that the two sets of ratings were correlated, with ratings on social perception and social adaptability ($r=.54$ and $.45$) significant at $P<.05$, whereas expressiveness and impression management ($r=.31$ and $.32$) were significant at $P<.10$. In addition, mean ratings were compared for each factor, and in no case did the self-ratings by entrepreneurs differ significantly from those provided by people who knew them well. When combined with the results of previous, related studies, (e.g., Moskowitz, 1990; Zebrowitz and Collins, 1997), these findings suggest that entrepreneurs' self-ratings on social competencies are indeed related to their overt, observable social skills as perceived by persons who know them well. This indicates that our self-report measure provided a reasonably valid proxy of entrepreneurs' social skills.

5. Discussion

The results of the present research offer support for the hypothesis that the higher entrepreneurs' social competence, the greater their financial success. For both samples, accuracy in perceiving others (social perception) was significantly related to a measure of financial success. In addition, for entrepreneurs in the cosmetics industry, social adaptability was related to such success (although not quite significantly so; $P<.06$). Finally, for entrepreneurs in the high-tech industry, expressiveness was significantly related to financial success.

The fact that significant relationships between certain aspects of social competence and financial outcomes were obtained for both samples suggests that entrepreneurs' social competence may influence their financial outcomes across a wide range of industries and settings. The two samples of entrepreneurs created distinctly different types of companies and worked in sharply contrasting business environments; moreover, entrepreneurs in the first sample were all female, while a large majority of those in the second sample were male. Yet, despite these differences, social competence was related to the financial success of both groups of entrepreneurs (although, as noted in more detail below, the specific pattern of these relationships differed somewhat for the two samples).

Overall, these findings appear to shed new light on the issue of why some entrepreneurs are more successful than others. Previous research on this important question has often focused on the characteristics of individual entrepreneurs — their personal traits or cognitive processes (e.g., [Baron, 1998](#)) — or on their social capital — their reputation, experience, and social networks (e.g., [Greene et al., 1997](#)). The present findings indicate that in addition, certain aspects of entrepreneurs' behavior — specifically, their effectiveness in interacting with others on a face-to-face basis — may play a role. As we noted earlier, we believe that social capital often assists entrepreneurs in gaining access to venture capitalists, potential customers, and prospective employees. However, once such access is gained, the outcomes they actually experience are influenced, to some degree, by their effectiveness in interacting with these persons. Do entrepreneurs secure the funding they seek? Forge favorable and trustworthy alliances? Obtain the support and services of partners and employees they wish to recruit? Certain aspects of social competence may well influence these outcomes.

The finding that entrepreneurs' social competence may play a role in their success agrees with a rapidly growing body of evidence suggesting that such competence is a strong predictor of success in many other business contexts — for instance, with respect to performance appraisals ([Wayne et al., 1997](#)), frequency and speed of promotions ([Ferris et al., in press](#)), and even executive health (socially skilled executives appear to be better able to resist the adverse effects of high levels of stress; [Perrewe et al., in press](#)). The present findings add to this literature by suggesting that high social competence may prove beneficial for entrepreneurs, too.

At this point, we should hasten to add that there is no intention here of suggesting that the effects of social competence are stronger or more important in determining entrepreneurs' success than those of other factors. On the contrary; we fully share the perspective, reflected in current entrepreneurship research, that many factors, interacting in complex ways, ultimately determine the success of individual entrepreneurs — their personal characteristics, market forces and conditions, industry trends and dynamics, and so on (see, e.g., [Shane and Venkataraman, 2000](#)). Here, we simply suggest that entrepreneurs' effectiveness in interacting with other persons may be one piece of this intricate puzzle, and should not be overlooked.

An important question vis-à-vis the present findings, however, concerns the fact that a somewhat different pattern of results was obtained for the two samples of entrepreneurs. While accuracy with respect to social perception influenced financial success for both

samples, social adaptability exerted such effects only for the first (cosmetics industry) sample, while expressiveness exerted significant effects only for the second (high-tech) sample. One possible explanation for these contrasting patterns involves the fact that the business environments in which these two groups of entrepreneurs operate call for different social proficiencies. The first group of entrepreneurs (those in the cosmetics industry) was heavily involved in face-to-face sales, either of products or, more importantly, the idea of joining their distribution organizations. To succeed, these entrepreneurs had to approach and interact with total strangers. Success in such activities would appear to require high levels of social adaptability. Indeed, close examination of the items included in the social adaptability scale suggests that several tap what might appropriately be termed “social boldness” — the ability to approach and interact with total strangers (e.g., “I’m comfortable with all people — young or old, people from the same or different backgrounds as myself,” “I can talk to anybody about anything,” “I have no problem introducing myself to strangers.”). It seems reasonable to suggest that the ability to approach and interact with strangers might be very useful for individuals in our first sample. In contrast, social adaptability or boldness might be less relevant for, or, at the very least, less used by entrepreneurs in the second (high-tech) sample, since in their daily activities, they did not find it necessary to approach, meet, and interact with a large number of total strangers.

In contrast, skill with respect to social perception might well prove valuable to both groups of entrepreneurs. As noted previously, those in the first (cosmetics industry) sample were heavily involved in face-to-face sales. Previous research suggests that success in this role is linked to skill at “reading” others accurately (e.g., [Kring et al., 1994](#)). Entrepreneurs in the second (high-tech) sample often faced the task of negotiating with potential customers and suppliers; previous findings suggest that skill in “reading” others accurately can contribute to success in this context (e.g., [Thompson, 1998](#)).

Turning to expressiveness, which was positively related both to high-tech entrepreneurs’ business income and their companies’ sales revenues, it is important to note that the companies included in the present sample were relatively small (median number of employees = 86). Thus, they were still at a stage in their development where founders had considerable direct contact with employees. Previous research suggests that a high level of expressiveness is often a “plus” from the point of view of generating enthusiasm in others (e.g., [Friedman et al., 1980](#)). Thus, it is possible that the greater the expressiveness shown by these entrepreneurs, the greater their success in generating enthusiasm and motivation among their employees. This, in turn, could contribute to their companies’ success. While this reasoning is consistent with the results of previous studies, further research is clearly required to evaluate its accuracy.

Another result that might, at first glance, seem somewhat puzzling, is the fact that emotional intelligence — an aspect of social competence that has received considerable attention in recent years — did not emerge as a factor on our questionnaire, despite the fact that items employed to measure it were based closely on descriptions of emotional intelligence by [Goleman \(1995, 1998\)](#) and others (e.g., [Mayer et al., 1998](#)). Given these results, emotional intelligence could not, of course, be employed as a predictor of entrepreneurs’ financial success. While these findings contrast with widely publicized claims

in the media concerning the importance of emotional intelligence, they actually agree quite closely with the results of recent, careful efforts to determine whether the skills described by Goleman (1995) cluster together as a single factor. These studies (e.g., Davies et al., 1998) provide little support for this suggestion; indeed, the only component of emotional intelligence that has emerged reliably in such systematic research is social perception, which was significantly related to entrepreneurs' financial success in the present research. Given these findings, it appears that recent attention to emotional intelligence may not be justified and may represent more "media appeal" than sound scientific findings. Nonetheless, this issue remains somewhat open, and must be carefully addressed in further research before any firm or definitive conclusions can be reached.

Before concluding, additional limitations of the present research should be addressed. First, while the present findings indicate that several aspects of social competence are significantly linked to entrepreneurs' financial success, they provide no direct evidence on *how* these links emerge. Four possible mechanisms appear to merit further attention. First, as noted earlier, social competence may assist entrepreneurs in working with other members of the founding team; this might contribute to their financial success. Second, social competence may assist entrepreneurs in establishing positive, cooperative relationships with persons outside their companies but who are important for their financial success — venture capitalists, potential customers, prospective employees, to name just a few. Third, social competence may contribute to entrepreneurs' success by assisting them in forming business alliances. Such alliances are a growing source of competitive advantage for emerging firms (e.g., Deeds and Hill, 1999), and have been found to be positively associated with the rate of new product development and the creation of shareholders wealth (e.g., Park and Kim, 1997). Finally, as noted earlier, social competence may provide entrepreneurs with enhanced access to opportunity-related information, and may also assist them in communicating such information to other members of the new ventures. This, in turn, can be an important source of competitive advantage (e.g., Hitt et al., 1999). While all these mechanisms are plausible, no direct evidence on them is provided by the present research. Thus, future studies should be conducted to determine whether, and to what extent, various social competencies do indeed influence entrepreneurs' performance through these mechanisms.

Another limitation of the present findings involves the fact that they are based, to a large degree, on entrepreneurs' self-reports of their own social competence and financial success. This raises questions concerning the accuracy of both of these measures. To address the first of these problems, we cross-validated the measure of social competence employed, in which a group of entrepreneurs completed our measure of social competence, and, in addition, people who knew them well (e.g., spouses, other family members, close business associates) rated them on the same dimensions. As noted earlier, we found that entrepreneurs' self-reports agreed rather closely with ratings of their social skills by people who know them well. This finding provides initial evidence for the validity of this measure, but due to the sample size, these findings should be interpreted with considerable caution. We should add, however, that the results of many other studies suggest that people are generally quite accurate in assessing certain aspects of their own behavior, including their social skills (see, e.g., Gifford and O'Connor, 1987; Moskowitz, 1990; Zebrowitz and Collins, 1997 for a review of such

research). It is clear, however, that additional research conducted with larger samples is needed to further assess the extent to which entrepreneurs' can accurately evaluate their own social competence.

To address the second issue (the question of whether demographic and financial information reported by participants was accurate), we obtained company printouts, which reported entrepreneurs' earnings, organizational size, and tenure, for a random sample of 43 (or 25%) of the 172 participants in the initial sample. A comparison between the self-reports of entrepreneurs and these printouts indicated that the information provided by the entrepreneurs in our sample was highly accurate; with the exception of rounding errors, the figures were virtually identical. These findings suggest that the information reported by entrepreneurs in our study was indeed accurate.

Finally, we should note that the present research does not address the following issue of causality: Does a high level of social competence contribute to entrepreneurs' success as we have suggested here, or, alternatively, does success somehow improve entrepreneurs' social competence? The latter argument is certainly plausible, because success confers many advantages that might conceivably assist individuals in improving their social skills (e.g., a broader range of social contacts, increased educational opportunities). Only longitudinal research in which entrepreneurs' social competence is assessed at various points in time can fully address this issue. However, we should note that research on social skills conducted by psychologists suggests that in general, such skills do not improve markedly without specific interventions directed toward producing such change (e.g., [Nietzel et al., 1998](#)). Further, recent studies of successful entrepreneurs indicate that they tend to become increasingly busy as their businesses prosper (e.g., [Curtis, 2000](#)). Such persons often work 12-, 15-, or even 18-h days, and have little time for activities outside their new venture. As one recent high-tech millionaire puts it: "Everybody talks about finding balance, but I'm inherently not a balanced kind of guy. There's work, there's family, there's personal life, and there's just not enough time in the day to do a great job on all three." (Brad Silverberg, quoted in [Curtis, 2000](#)). Such lifestyles seem to leave little time for improving social skills. On the basis of such considerations, we believe it is more likely that social skills contribute to entrepreneurs' success rather than the reverse. However, this is clearly an empirical issue, and should be carefully addressed in future research.

To conclude: The findings of the present research appear to have both theoretical and practical implications. From a theoretical perspective, they suggest that in order to fully answer the question "Why are some entrepreneurs more successful than others in starting new ventures and exploiting opportunities?" it may be useful to examine certain aspects of entrepreneurs' behavior (e.g., [Gartner, 1988](#)), their personal characteristics, cognitive processes (cf., [Baron, 1998](#); [Busenitz and Barney, 1997](#)), as well as the market conditions in which they operate and industries in which they compete (e.g., [Venkataraman and Van de Ven, 1998](#)). Doing so may offer additional insights into this complex question. For instance, it seems possible that a lack of social competence may be one factor contributing to the puzzling fact that some entrepreneurs who have sound ideas, possess considerable technical competence, and demonstrate high motivation still fail. Perhaps it is their ineffectiveness in interacting with others that is responsible, in part, for these negative outcomes.

From a practical perspective, the present results point to additional means for assisting entrepreneurs. In contrast to aspects of personality, the social skills of which social competence is composed are readily open to modification. Indeed, techniques for enhancing such skills have been developed by psychologists, and used with considerable success in many contexts (e.g., [Nietzel et al., 1998](#)). It seems possible that providing entrepreneurs with appropriate training in social skills might assist them in their efforts to exploit opportunities and launch new ventures. Given the crucial role played by entrepreneurs in creating wealth not only for themselves and their companies, but for their societies as well ([Venkataraman, 1997](#)), this would appear to be a highly desirable outcome.

Acknowledgements

The authors wish to express their sincere appreciation to Rob McDonald for his outstanding assistance with respect to data analysis and to Gerald R. Ferris for supplying articles and references directly relevant to the present research.

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